

IN THE CLAIMS:

Sub G1  
23. (Twice Amended) A method of producing antibodies to an antigen of human immunodeficiency virus type 1 (HIV-1), said method comprising:

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FR NV  
(a) providing an antigen of HIV-1, wherein said antigen is the expression product of a host transformed with a vector containing a (nucleic acid fragment) of plasmid λ-J19, and wherein said nucleic acid fragment [comprises the restriction site HindIII at about coordinate 9250, the restriction site SacI at about coordinate 9200, and the restriction site BglIII at about coordinate 9150] extends from the restriction site (KpnI at about coordinate 6100) to the restriction site (BglIII at about coordinate 9150) of plasmid λ-J19;

(b) raising antibodies against said antigen, and

(c) recovering said antibodies.

Sub G2  
32. (Amended) A method of producing antibodies to an antigen of human immunodeficiency virus type 1 (HIV-1), said method comprising:

(a) providing an antigen of HIV-1, wherein said antigen is the expression product of a host transformed with a vector containing a nucleic acid fragment of plasmid λ-J19, and wherein said (nucleic acid fragment) [comprises the restriction site HindIII at about coordinate 9250, the restriction site SacI at about coordinate 9200, the restriction site BglIII at about

coordinate 9150, the restriction site *Bgl*III at about coordinate 8750, and the restriction site *Kpn*I at about coordinate 8700] extends from the restriction site (*Kpn*I at about coordinate 3500) to the restriction site (*Bgl*III at about coordinate 6500) of plasmid  $\lambda$ -J19,

(b) raising antibodies against said antigen, and

(c) recovering said antibodies.

33. (Amended) A method of producing antibodies to an antigen of human immunodeficiency virus type 1 (HIV-1), said method comprising:

(a) providing an antigen of HIV-1, wherein said antigen is the expression product of a host transformed with a vector containing a nucleic acid fragment of plasmid  $\lambda$ -J19, and wherein said nucleic acid fragment [comprises the restriction site *Hind*III at about coordinate 9250, the restriction site *Sac*I at about coordinate 9200, the restriction site *Bgl*III at about coordinate 9150, the restriction site *Bgl*III at about coordinate 8750, the restriction site *Kpn*I at about coordinate 8700, the restriction site *Xho*I at about coordinate 8600, the restriction site *Bam*HI at about coordinate 8150, the restriction site *Hind*III at about coordinate 7850, and the restriction site *Bgl*III at about coordinate 7600] extends from the restriction site (*Pst*I at about coordinate 800) to the restriction site (*Kpn*I at about coordinate 3500) of plasmid  $\lambda$ -J19,

(b) raising antibodies against said antigen, and

(c) recovering said antibodies.